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Dear Sir,

On behalf of Mālama Maunalua, thank you for the opportunity to provide input to NOAA's Hawaiian Islands Humpback Whale National Marine Sanctuary Management Plan ("HIHWNMS Plan") Review process. Mālama Maunalua is a community-based organization dedicated to the conservation and restoration of Maunalua Bay in Southeast Oʻahu. Maunalua Bay is the only large Bay on Oahu that falls within the sanctuary.

We are very encouraged to hear that NOAA will consider enlarging the HIHWNMS Plan's scope to include conservation and management of additional marine species and habitats, and we fully support the holistic systems-based approach being contemplated. Recent research shows that Maunalua Bay's reefs and other habitats are on the decline, mainly due to a convergence of land-based pollution, invasive species, and unsustainable harvesting practices. It will require no less than an integrated systems approach, one that considers both coastal conditions and those of associated watersheds, to effect restoration. Therefore we suggest a consideration of specific monitoring and management issues for Maunalua Bay. More specifically:

Include Watershed Management:

We recommend that the Plan recognize and address the fundamental connection between watershed function and the health of adjacent coastal coral reefs and other valuable marine ecosystems. The discharge of runoff, sediment and related pollutants into Maunalua Bay is considered one of the most damaging factors contributing to the deteriorating condition of the Bay. Improved tools for monitoring and controlling the land-based factors responsible for the degradation of coastal coral reefs and other resources are needed.

Consider No Discharge (pollutants) Areas: The continuing discharge into Maunalua Bay of runoff laden with sediment and related pollutants is in excess of what the Bay can process naturally. Maunalua Bay also has considerable boat traffic due to the presence of the Maunalua Bay Boat Ramp (operated by DOBOR) and the Hawaiʻi Kai Marina. We recommend that the HIHWNMS Plan review and revision process consider the establishment of No Discharge Areas within the Sanctuary, including in Maunalua Bay, as a tool for management. A monitoring component would also be essential.

Map and Monitor Invasive Alien Algae (IAA) as indicator of Habitat Health: The State DLNR-Division of Aquatic Resources has mapped the presence of IAA over nearly 200 acres of Maunalua

Bay. Main species of concern are *Avrainvillea amadelpha*, *Gracilaria salicornia* and *Acanthopora spicifera*. NOAA has provided a grant to the Hawai'i Chapter of the Nature Conservancy and its sub-awardee Mālama Maunalua, to remove 23 acres of *A. amadelpha* in the first large scale removal project for the species in Hawai'i. This project is on schedule, to be completed in April 2011. Ongoing monitoring and assessment are needed to evaluate impact of this removal on native habitats and populations, as well as to monitor cover of IAA in the entire bay.

Fisheries: Recent research indicates that the fish and invertebrate populations of Maunalua Bay's inshore are depleted and that the coastal coral reefs are chronically stressed and recruitment is low. What is not understood is the connection between the condition of the reef and the health of Humpback whales. Considering that this species spends a significant amount of time in Maunalua Bay, potential connections should be investigated. Similarly, the condition of marine habitat and food sources for other currently managed species found in the Bay such as the endangered Hawaiian Monk Seal (*Monachus schauinslandi*) and threatened Honu (*Chelonia mydas*) should also be considered.

Resources/sites of special historical/cultural concern: We recommend that the HIHWNMS Plan review process include a consideration of management tools for cultural resources. Mālama Maunalua has identified several fish and invertebrate species of special cultural concern that were highly valued historically and whose populations the community would like to restore. Some of these are identified in the 2009 *Maunalua Bay Conservation Action Plan*. Further, there are four areas that constitute sites of special concern at Maunalua Bay: *Kalauha'iha'i*, a historic Hawaiian fishpond in Kuli'ou'ou; the spring at *Kawaikui*, famous for limu and a historic watering replenishment spot for early ships; Paiko Lagoon, a wildlife sanctuary managed by DLNR-DOFAW and its adjacent Hawaiian fishpond, *Kanewai*; and Hawai'i Kai Marina, originally *Ke Ahupua O Maunalua*, once the largest inland fishpond on O'ahu. Because of the connectivity of these four sites to Maunalua Bay and their capacity to impact the Bay's systems it would be helpful if these received special management consideration.

Finally, we greatly commend NOAA for affording opportunities for community groups engaged in marine resource management to participate in the HIHWNMS Plan review process. Community kuleana for a place reflects an understanding that ecosystem management is at its core people management, and in this regard community groups can bring a much needed focus. We hope NOAA will continue to include communities throughout all planning and plan implementation phases for the Sanctuary.

Related to this, Mālama Maunalua would be pleased to support the HIHWNMS Plan process in an advisory capacity going forward.

Again, mahalo for the chance to comment.



Alyssa Miller
Mālama Maunalua

cc: MM Board of Directors: Jennifer Taylor, Carol Wilcox, Jean Tsukamoto, Mitch D'Olier,
Laura Thomson